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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/761,671

01/18/2001

Jeffrey Scott Eder

5378

53787

7590

06/13/2006

ASSET TRUST, INC.  
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SUITE 7362  
BOTHELL, WA 98021

EXAMINER

RETTA, YEHDEGA

ART UNIT

PAPER NUMBER

3622

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/761,671	EDER, JEFFREY SCOTT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Yehdega Retta	3622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 69-103 is/are pending in the application.
- 4a) Of the above claim(s) 104-118 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 69-103 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/29/05, 1/14/06</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is responsive to amendment filed April 3, 2006. New claims 101-118 have been added. Claims 69-103 are now pending in this application. Claims 104-118 are withdrawn from consideration.

### ***Election/Restrictions***

Newly submitted claims 101-118 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 69-103, drawn to identifying one or more value driver candidates using a neural network model, classified in class 705, subclass 7.
- II. Claims 104-118, drawn to aggregating data in a repository and data mining the information to identify value drivers, classified in class 707, subclass 3.

Inventions of Group I (claims 69-103) and Group II (claims 104-118) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because aggregating a plurality of information, datamining the information to identify value drivers and creating time series network model, independently claimed in the subcombination group II is not a limitation of the

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independently claimed combination of group I. The subcombination has separate utility such as aggregating a plurality of information and datamining the information. Since applicant independently claim the invention of this group, it is prima facie showing that the inventions are intended to be independently and distinct and are shown to be separately usable.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 104-118 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 69-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over “How to sort out the premium drivers of post-deal value” Bielinski, Daniel W. Mergers and Acquisitions: Jul/Aug 1993, Vol. 28, Iss.1; pg. 33, 5 pgs (hereinafter Bielinski), further in view of “Computers” Brown, Carol E, Coakley, James, Phillips, Mary Ellen, Management Accounting, Montvale, May 1995 (hereinafter Brown).

Regarding claims 69, 70, 72-76, Bielinski teaches valuation tool for integrating transaction data for a commercial enterprise in accordance with a common data dictionary; using model to identify one or more value drivers (key factors or value drivers), such as growth, profit

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margins, etc are varied systematically to test the sensitivity of the indicated business value to each driver (pp1) ... assessing changes in one value driver at a time, elements of value selected from the group consisting of brands, customers, employees intellectual capital, partner etc. (pp 1-2); identifying value drivers (sensitive analysis of past results offers clues to what can be done in the future and which value drivers should receive the most attention to achieve optimal rewards) (see pp 1); use of models to complete analyses ... (see page 3). Bielinski teaches use of computerized models to estimate the value of a company and to guide them in setting purchase price. Bielinski states, relatively few buyers take advantage of the capabilities of these models to enhance their due diligence and formulate strategies for increasing the cash flow and enhancing the value of their acquired targets... indeed as the art of modeling has progressed, new methodologies have been developed and applied to actual transaction in the market to sharply widen the utility and versatility of computer-based valuation value. Bielinski does not explicitly teach neural network models using the indicators and a portion of the data in order to identify value driver candidates. Brown teaches valuation using neural network and training neural network models for aspects of financial performance using indicators (see pgs 1-2 and 5-6). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Browns teaching by using neural network to analyze data, since it is well known that neural network increase score prediction accuracy and enable fast accurate score model implementation. Bielinski teaches financial performance selected from group consisting of revenue, expense, capital change etc., (see pp 2).

Regarding claim 71, Bielinski teaches identifying changes that optimize financial performance, however failed to teach the use of Markov Chain Monte Carlo model or use

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genetic algorithms. Official notice is taken that is old and well known in the art of finance to use optimization tools. It would have been obvious to one of ordinary skill in the art to use such model and other forms of optimization to maximize profit.

Regarding claims 77-100, Bielinski teaches aggregating enterprise related transaction data from one or more enterprise management system, creating performance indicators, analyzing historical and forecast data for aspects of financial performance using indication algorithms and value driver candidates and creating impact summaries (see page 1-5). Bielinski teaches using computerized models to estimate the value of a company, facilitating value creation, analyzing historical data and forecast data, however does not teach training neural network models for one or more aspects of financial performance using performance indicators. Brown teaches valuation using neural network and training neural network models for aspects of financial performance using indicators (see pgs 1-2 and 5-6). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement Browns teaching by using neural network to analyze data since it is well known that neural network increase score prediction accuracy and enable fast, accurate score model implementation. Bielinski teaches financial performance selected from the group consisting of revenue, expense, capital change, cash flow etc., (see pgs 1&2). Bielinski teaches logged or recorded events for transaction data (see pg. 2). Bielinski teaches element of value selected from the group consisting of brands, customers, employees, etc., analyzes calculated for specific point in time, a net contribution of each element of value (see pg 2).

***Response to Arguments***

Applicant's arguments filed April 4, 2006 have been fully considered but they are not persuasive. Applicant asserts that Bielinski teaches away from the topology of the neural network models taught by Brown and refers to page 8 of Koller. Examiner could not find any indication in Koller that the neural network could not be used in identifying value drivers. Applicant also alleges that the Reilly reference also did not provide incentive to complete the claimed analyses. Applicant also alleges that the two reference teach away from the theoretical combination contained in the Office Action, however does not provide any support. Applicant's argument is just an allegation. Applicant also argues that the office action contains "an official notice" regarding the use of technologies that the Examiner claims are well known for the use in optimization and states that the Examiner failed to provide a reference that would support the development of a comparable model of enterprise ... It is unclear to the Examiner whether Applicant is arguing that it is unknown that a neural network model increase score prediction accuracy or if Applicant is arguing that it is unknown that the neural network is used in optimization. Examiner would like to point out to Applicant that Brown teaches that a neural network is used to make accurate forecast (see page 4 and 5).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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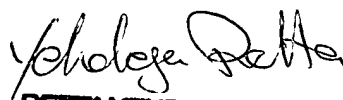
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yehdega Retta whose telephone number is (571) 272-6723. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YR

  
**RETTA YEHDEGA**  
**PRIMARY EXAMINER**